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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,605	09/25/2003	Toshifumi Hayami	2018-780	1319
23117 7590 10/20/2005			EXA	MINER
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR			CASTRO, ARNOLD	
	N, VA 22203	LOOK	ART UNIT	PAPER NUMBER
	•		. 3747	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
Office Action Comments	10/669,605	HAYAMI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Arnold Castro	3747				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
	action is non-final.					
3) Since this application is in condition for allowar		secution as to the merits is				
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
<ul> <li>4)⊠ Claim(s) <u>1-16</u> is/are pending in the application.</li> </ul>						
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1 and 13-16</u> is/are rejected.						
7)⊠ Claim(s) <u>2-12</u> is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.	•				
	,					
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the	•	, ,				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ul>						
* See the attached detailed Office action for a list  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4)	(PTO-413)				

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki et al. US/6,520,125.

Auzuki discloses a cooling system wherein an internal combustion engine cooling system comprising: a radiator (200) that receives cooling water from an internal combustion engine, cools the cooling water and returns cooled cooling water into the internal combustion engine; a coolant passage connecting the internal combustion engine and the radiator, and including an inlet passage through which the cooling water flows from the internal combustion engine into the radiator, and an outlet passage through which the cooling water flows from the radiator into the internal combustion engine; a bypass passage (220) connecting the inlet passage and the outlet passage to make the cooling water discharged from the internal combustion

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engine bypass the radiator; a flow control valve (400) placed at a junction of the outlet passage and the bypass passage to control radiator flow rate at which the cooling water flows through the radiator and bypass flow rate at which the cooling water flows through the bypass passage; a water pump (500) placed in the inlet or the outlet passage to circulate the cooling water through the internal combustion engine and the radiator; a desired coolant temperature setting means (600) for setting a normal desired coolant temperature of the cooling water flowing through the outlet passage; and a coolant temperature control means for controlling temperature of the cooling water flowing through the outlet passage on the basis of the desired coolant temperature set by the desired coolant temperature setting means, wherein the desired coolant temperature setting means changes the desired coolant temperature according to operating condition

of the internal combustion engine (100), the traveling condition of a vehicle, operating conditions, and ambient conditions is used to calculate desired temperature see claim 5 and specification column 7 and figure 4.

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

- 2. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. US/6,520,125.
- 3. Claim 13-16 claim cooling system in combination with well-known types of engine. The specification does not entail of any particular benefit these engine gain form any other conventional engine using same cooling system. They engine used is and obvious design choice as no unexpected results occur between the known types of engines.

### Allowable Subject Matter

3. Claims 2-12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnold Castro whose telephone number is (571) 272-4839. The examiner can normally be reached on Mon, Tues, Wed, Thurs 9-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yuen Henry can be reached on (571)-272-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Arnold Castro Examiner Art Unit 3747

AC

Henry C. Yuen
Supervisory Patent Examiner
Group 3700